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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Itamar WILLNER

I.A. No. PCT/IL00/00048
I.A. Filed: January 25, 2000
Appln. No.: 09/889,936
Nationalized: July 25, 2001
For: DETECTION OF SMALL
MOLECULES BY USE OF A...

INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted in accordance with 37 CFR §§1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross- referencing it as a related application.

- 1. This IDS should be considered, in accordance with 37 CFR \$1.97, as it is filed before the mailing date of a first office action on the merits.
- 2. In accordance with 37 CFR §1.98, this IDS includes a list (e.g., Form PTO/SB/08A) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an

In re Appln. Nov. 09/889,936

attachment hereto. A copy of each document listed is attached.

- 3. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).
- 4. In accordance with 37 CFR §\$1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in \$1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

BROWDY AND NEIMARK

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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| (Z.) | Somplete if Known | |
| Application Number | 09/889,936 | |
| Filing Date | July 25, 2001 | |
| First Named Inventor | Itamar WILLNER | |
| Group Art Unit | | |
| Examiner Name | | |
| Attorney Docket Number | WILLNER=5 | |

| | | U.S. Patent Document | | Name of Patentee or Applicant | Date of Publication of | Pages, Columns, Lines, |
|----------------------|--------------------------|----------------------|--------------------------------------|-------------------------------|---------------------------|-------------------------------------------------------|
| Examiner nitials* | Cite No. ¹ | Number | Kind Code ² (if known) | of Cited Document | Cited Document MM-DD-YYYY | Where Relevant Passages or Relevant Figures Appear |
| | AA | 5,658,732 | | EBERSOLE et al. | 08-19-1997 | |
| | AB | 4,242,096 | | OLIVEIRA et al. | 12-30-1980 | |
| | AC | 4,735,906 | | BASTIAANS | 04-05-1988 | |
| | AD | 4,314,821 | | RICE | 02-09-1982 | |
| ··· | AE | 4,236,893 | | RICE | 12-02-1980 | |
| - | AF | 4,999,284 | | WARD et al. | 03-12-1991 | |
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| | FOREIGN PATENT DOCUMENTS | | | | | | | |
|-----------------------|--------------------------|--------------------------------------------------|------------------------------|----------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------|----------------|
| Examiner Initials* | | Office ³ | Foreign Patent Nun Number | nber Kind Code ⁵ (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T _e |
| | AG | EP | 0 453 224 | | HUGHES AIRCRAFT COMPANY | 10-23-1991 | | |
| | АН | wo | 98/57141 | | BIOSENSOR APPLICATIONS SWEDEN AB | 12-17-1998 | | |
| | Al | wo | 97/04314 | | YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM | 02-06-1997 | | |
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| Signature | Considered | | | |

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

 μ χ Complete if Known Substitute for form 1449A/PTO 09/889,936 **Application Number INFORMATION DISCLOSURE** July 25, 2001 Filing Date Itamar WILLNER First Named Inventor STATEMENT BY APPLICANT Group Art Unit (use as many sheets as necessary) **Examiner Name**

Attorney Docket Number

WILLNER=5

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| | | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | |
|-----------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | AJ | Sten-Anders BRINK, "Bofors Schnauzer - A Biosensor for Detection of Explosives", <u>Eurel International</u> <u>Conference: The Detection of Abandoned Land Mines: A Humanitarian Imperative Seeking a Technical</u> <u>Solution</u> , 1996, p. 33-36 | |
| | AK | Upvan NARANG et al., "Multianalyte Detection Using a Capillary-Based Flow Immunosensor", <u>Analytical</u> Biochemistry, 1998, pp. 13-19, vol. 255, article no. AB972411 | |
| | AL | Alan SHONS et al, "An Immunospecific Microbalance", <u>J. Biomed. Mater. Res.</u> , 1972, pp. 565-570, vol. 6 | |
| | AM | Dean D. FETTEROLF et al., "An Enzyme-Linked Immunosorbent Assay (ELISA) for Trinitrotoluene (TNT) Residue on Hands", <u>Journal of Forensic Sciences</u> , 1991, pp. 343-349, vol. 36, no. 2 | |
| | AN | Hiroshi MURAMATSU et al., "Piezoelectric Crystal Biosensor System for Detection of <i>Escherichia Coli</i> ", <u>Analytic</u> <u>Letters</u> , 1989, pp. 2155-2166, vol. 22(9) | |
| | AO | H. MURAMATSU et al., "Piezoelectric Immuno Sensor for the Detection of Candida albicans Microbes", Analytica Chimica Acta., 1986, pp. 257-261, vol. 188 | |
| | AP | Michael D. WARD et al., "In Situ Interfacial Mass Detection with Piezoelectric Transducers", <u>Science</u> , 1990, pp. 1000-1007, vol. 249 | |
| | AQ | Ahmad A. SULEIMAN et al., "Recent Developments in Piezoelectric Immunosensors: A Review", <u>Analyst</u> , 1994, pp. 2279-2282, vol. 119 | |
| | AR | Joy E. ROEDERER et al., "Microgravimetric Immunoassay with Piezoelectric Crystals", <u>Anal. Chem.,</u> 1983, pp. 2333-2336, vol. 55 | |
| | AS | Hiroshi MURAMATSU et al., "Piezoelectric Crystal Biosensor Modified with Protein A for Determination of Immunoglobulins", Anal. Chem., 1987, pp. 2760-2763, vol. 59 | |
| | АТ | Jakob SLANINA et al., "Determination of Sulfur Dioxide in Ambient Air by a Computer-Controlled Thermodenuder System", Anal. Chem., 1987, pp. 2764-2766, vol. 59 | |
| | AU | Bernd KÖNIG et al., "Detection of Viruses and Bacteria with Piezoelectric Immunosensors", <u>Analytical letters</u> , 1993, pp. 1567-1585, vol. 26(8) | |
| | AV | Patent Abstracts of Japan, Publication no. 01269485, Publication date October 26, 1989 | |
| | AW | Patent Abstracts of Japan, Publication no. 01269488, Publication date October 26, 1989 | |
| | AX | Patent abstract for DE 3733986, published April 20, 1989 | |
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| Examiner | Date | |
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| Signature | Considered | |

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.